BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

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MARKET DESIGN WORKSHOP WITH : Docket Numbers

STATE COMMISSIONERS ON ENSURING : RM01-12-000

ADEQUATE RESERVE CAPACITY : EX01-3-000

- -x

Hyatt Regency

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The above-entitled matter came on for workshop, pursuant to notice, at 4:15 p.m.

BEFORE COMMISSIONERS:

NORA MEAD BROWNELL; PAT WOOD, III

APPEARANCES:

ON BEHALF OF THE FEDERAL ENERGY REGULATORY COMMISSION:

KEVIN KELLY

ALICE FERNANDEZ

DAVE MEAD

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PANELISTS:

THE HONORABLE SUSAN WEFALD, NORTH DAKOTA

THE HONORABLE TOM WELCH, MAINE

THE HONORABLE MAUREEN HELMER, NEW YORK

THE HONORABLE DIANE MUNNS, IOWA

THE HONORABLE LORETTA LYNCH, CALIFORNIA

THE HONORABLE DICK HEMSTAD, WASHINGTON

P R O C E E D I N G S

THE HONORABLE WOOD: I'd like to welcome everybody here. I'm Pat Wood. I'm joined by Nora Mead Brownell from FERC and our Staff, Alice Fernandez, Kevin Kelly, and our newest member who moved from there to here, Ed Meyers, who is now the head of our office of state relations at the FERC, which we're glad to have.

And we're excited today to focus on a number of our continuing panels. We've had now, as of today, about 10 full working days of hearings, Commissioner and Staff-led hearings since October on what is it that an RTO does, not just what are they and are they independent and all that, but what do they do, what are the details of what is an RTO to do to make sure the wholesale markets actually work and benefit customers both in the short and the long run.

We've identified through that process since October a number of issues that really are unresolved, and I think I would at this point of where we are characterize those into three baskets. The first basket, of which yesterday's discussion was a part, is what do we mean by "standardized." When we say "standardized market design," you know, what level of standardization are we talking about and not. So that's kind of a big question, and we've certainly had that discussion.

The second one was a discussion we had Thursday morning on market mitigation, market power tools, what market mitigation tools are in the toolbox, basically, for regulators, y'all and us, and the people that administer the RTOs, what tools do they have to address instances of market power.

And the third issue is really what today's panel is all about. This is my personal belief. Nora may have a different one, but in my mind I thought there were really three hot-button issues that, I think, really need to be fleshed out before we, you know, put a stake in the sand and say here's what it is that RTOs are supposed to do, here's how wholesale markets are supposed to work, and that's this issue of planning for the future. What sort of steps do we take or not take to ensure that there's adequate reserve capacity in the markets.

And so we've got some folks that I have now known for probably six or seven years across the nation, fellow commissioners from the states that have hopefully thought deep thoughts about these issues, and we'd like to just at this point kind of go through the six of y'all and have you actually throw some thoughts out. They don't have to be horribly polished. I know Susan. They can be. But if you want to just put some ideas out there and say ditto what he said and ditto what she said and here's a different thought. We'd like to engage in this debate primarily because it's something I think -- or rather we perceive in California, certainly one of the issues out there that a lot of us have wondered about is the signal that the prior market design was sending about building new generation.

And I know we've had the same issues. Tom, you've lived with them, as has Maureen, up in the Northeastern markets, for a long time, and as I think Midwest opens up, Diane and Susan, you know, that issue is certainly one that we heard on the conference call with y'all about six weeks ago was very critical. I know Dick, you and Marilyn, we had dinner that night talking about some of the issues involving the Pacific Northwest are different yet again from those that Loretta and others face in the other parts of the West.

So there are a lot of different issues out here, but I think the core thing I'd like us to get some focus on by the close of the panel this afternoon is, you know, what kind of mechanism, if any, should be in place in an RTO, whether it's the Midwestern or out in the West RTOs, or up in the East or the South, what type of mechanisms should be put in place to ensure the kind of built-in reliability that we always had in fully bundled markets. I think that's one aspect of bundled markets we've all acknowledged worked well. It might have caused some overbuilding, but the lights stayed on.

How can we take from that and move to the new world in a way that makes sense, where customers may actually save some money or allocate more efficiently the cost of what is social insurance.

So I will just say, as opposed to what's been reported in the press, I don't have an idea made up in my mind about how this ought to come out. In my own home state of Texas, we purposely did not adopt one, although we thought about it as we walked out the door. My colleague, Judy Walsh, and I basically, as parting gifts to the Commission, said y'all better think about this. We have a 32 percent overbuild now, or in 2004, but you better have something in place for when the power plants get retired and put to bed.

So it's happened everywhere, but it's kind of going in different directions. I know when we got to the FERC, one of the things we saw was even within the Northeastern region alone, the capacity requirements were going in kind of different directions, just even with neighboring ISOs. So there's a lot of thought out there, and we'd like to mine your wealth of thought on these things, fellow commissioners, and see what we come up with.

So with no further ado, I'll turn over to each of the six state commissioner colleagues for some thoughts, and then we'll kind of go from there. So Susan?

THE HONORABLE WEFALD: I'm Commissioner Susan Wefald from North Dakota. Thank you for this opportunity to address the Commission. I want to begin by saying that I'm a strong advocate of enforced generating reserve requirements. There needs to be strong oversight, now that competition among utilities is replacing the cooperation that used to keep the lights on.

Some advocate leaving reserve requirements to the market. They say that the market will produce adequate generating capacity without regulatory interference. They think that market price increases that result when supplies tighten will cause supply increases sufficient to avoid shortages.

I disagree. First, I do not believe that market price signals will occur in time to avoid electricity shortages, considering the long lead times required for new construction. Long lead times will also prolong shortages and the resulting high prices.

Second, market signals would require faster responses than could be provided by projects that require longer lead times, thus further increasing our dependence on natural gas-fired generation.

And finally, as a consumer, I do not want to pay the increased prices necessary to send market signals for more generators. I've already seen what can happen to market prices when electric supply is tightened. That means that the question in my mind is not whether reserve capacity obligations should be imposed, but rather, who should impose them.

Traditionally, generation reserve requirements have been set by the NERC regional reliability councils. Looking ahead toward likely consolidations of reliability regions, I have real concerns that negotiations might yield compromises in reserve requirements. For instance, a major issue in the now-defunct MAPP/MAIN merger was whether to continue with existing MAPP financial penalties for reserve obligation deficiencies. Should the FERC impose RTO-administered reserve obligations?

There is definitely a role for regional coordination or state/federal cooperation across regions. Presently, all electric utility companies in our region are voluntary members of MAPP. We do not believe the FERC has reliability jurisdiction over all of the utilities in our region. Absent that jurisdiction, it may be preferable for the FERC to wait for a more comprehensive legislative solution.

All markets should operate under uniform requirements so that no individual participant or region is disadvantaged. FERC-imposed requirements on RTO participants might also serve as a disincentive for nonjurisdictional entities to join an RTO.

What form and mechanisms should reserve obligations take? If the FERC were to impose reserve obligations, then I suggest something similar to what's being done in MAPP, where we have long enjoyed exceptional reliability at reasonable prices.

MAPP's generation reserve sharing pool, GRSP, has been in effect since MAPP was formed in '72. The GRSP provides a sharing of MAPP regional generating reserve requirements, thus decreasing costs to consumers without compromising reliability. North Dakota, along with Iowa, Minnesota, Nebraska, and South Dakota, all rely on MAPP to ensure adequate generating reserves. This helps our multijurisdictional utilities by reducing the likelihood of different reserve requirements in different jurisdictions.

Last summer MAPP created a reserve task force to examine the future of generation reserve sharing in view of industry restructuring. The task force recommended, among other things, enforced planning reserve requirements should be continued. A copy of the task force's report, which includes detailed discussions of the

MAPP GRSP with comparisons with requirements in other regions, can be found on the MAPP Web page, which is referred to in my document.

MAPP imposes a reserve capacity obligation on each load-serving entity sufficient to ensure a loss of load probability of one day in 10 years. The RCO is currently set at 15 percent of each entity's maximum annual load. A new loss of load probability study that includes the impact of transmission constraints is scheduled to be completed in October 2002.

MAPP has a before-the-fact accreditation process for certifying capacity resources. The process relies on verified self-testing of generators and includes a verification of firm transmission service for accreditation of capacity purchases. There are also procedures for accreditation of capacity for wind generators and interruptible demand-side resources.

MAPP enforces its RCO with financial penalties assessed against load-serving entities whose reserves fall below 15 percent. MAPP's staff perform the after-fact seasonal audits, and GRSP participants found deficient are required to compensate compliant GRSP participants according to the rates set forth in the MAPP service schedule B. Thus, the schedule B rate tends to serve as an effective cap on MAPP capacity purchase prices.

MAPP schedule B is presently based on the cost of constructing a new combustion turbine that's set at $45,000 per megawatt per season. However, the MAPP reserve task force has recommended that 45,000 may not provide enough incentive for developing new resources.

Prior to May 1, 2000, the schedule B rate was set based on the cost of baseload units and exceeded $90,000 per megawatt per season.

MAIN has a somewhat similar capacity reserve sharing program, but with an 18 percent reserve requirement and no enforcement provisions, MAIN has experienced electricity shortages due at least in part to noncompliance with reserve obligations. I believe MAIN's problems in maintaining its reserve margin helped demonstrate why adequate enforcement of reserve obligations is critical to regional reliability.

MAPP is unique compared to most other NERC regions because generators that are down for maintenance, forced outages, et cetera, do not lose their accredited capacity rating. When outages occur, utilities must contract only for replacement energy. Not having to replace -- not having to purchase replacement capacity provides savings for both utilities and their customers. However, large spikes in MAPP's energy prices have occurred when plants have gone down unexpectedly.

A FERC Staff capacity reserve paper issued this past fall discusses the installed capacity ICAP payment system in the Northeast. ICAP has reserve obligations for both capacity and energy with enforcement penalties that effectively cap market prices for both capacity and energy. It appears that something similar may be possible for addressing price spikes nationally.

Thank you.

THE HONORABLE WOOD: Thank you, Susan. Tom Welch from Maine.

THE HONORABLE WELCH: Thank you. It's a pleasure to be here. I'm from the other Maine. We actually have a surplus, not necessarily due to any capacity rules we have in force at the moment.

The question you've asked us is whether the Commission should require RTOs to administer a regional long-term capacity obligation in wholesale markets, and if so, what form that obligation should take. The short versions of my answer are yes, in a form that ensures the dollars you collect from market participants to ensure adequate capacity actually go into the pockets of people who are subject to enforce the obligation to provide that capacity when you need it. The longer version of those answers follow.

I think that the debate among economists about whether the energy market alone can provide adequate incentives to ensure sufficient capacity to, say, a workably competitive electricity market, is intellectually interesting, but politically unprofitable.

The problem of whether there is adequate capacity is not just an economic question, it is a fundamental -- it is also fundamentally a political question. Whether a smoother price and supply curve produces a better long-term allocation of resources or not, I do not believe the public will leave public servants in office for long if the lights go out. Thus, I have concluded that for the foreseeable future, there is a governmental responsibility to keep an eye on the future and ensure, to the extent possible, and not just assume, that adequate capacity will exist at all moments, and not just on average.

Put another way, the public is entitled to have a reasonable level of assurance that their lives will not be interrupted or disrupted, as they have occasionally been when capacity is inadequate, even for a short time, by the effects of Adam Smith's invisible hand.

The public's problem is not that Mr. Smith's hand exists. Its existence worked quite well in a great many markets for most of the time. A major part of the problem in today's electricity market is that the public does not have an effective means to see the hand coming and take evasive action. At least in the near term, we need some form of capacity market to help assure the public that we will have adequate electricity capability to provide reliable service. In the longer term, we need to make certain that customers have opportunities for effective demand response so we don't fall in the trap of purchasing far more capacity or reliability than customers want or are willing to pay for.

I don't know, frankly, whether even an effective demand response regime would completely eliminate the need for a capacity market. For that reason, I'm going to focus the remainder of my comments on what I think that capacity market might look like.

Any mechanism to ensure adequate capacity should meet at least two objectives. It should interfere minimally in a competitive market, and it should ensure that you get what you pay for. Those of you who have read Maine's pleadings in various ICAP dockets are probably aware, that at least in our view, ICAP in its various incarnations fails the second test miserably. In ICAP markets the money goes to people who, because they don't exist in generation, have every incentive to create shortages of capacity rather than firms that will build the services needed to sustain a competitive energy market.

As an alternative to ICAP and as a model for the kind of market I believe the FERC should direct the RTOs to create, I suggest the following, and forgive me for the details. The RTO, with appropriate market participant input, would develop projections of need for one, two, three, four, five years in the future. The need for capacity could be subdivided into various categories, such as quick start and baseload and the like.

Second, the RTO would then invite bids for each year for commitments to have a certain number of megawatts of capacity on-line providing energy. Bids could be for specified payment, perhaps coupled with a commitment for a committed energy price to be bid. For five years out, bids would be accepted for up to 20 percent of the need; for four years out, 25 percent; for three years out, 33 percent, and so forth.

Each year, the remaining need is auctioned. That is, in the second year of the initial five-year period, one quarter would remain and be put out for bid. Projections would be revised for each year of the capacity load. So for example, if the need in 2007 was 100 megawatts, in the year 2002 you bid out 20 megawatts. In 2002, if it were 160, if you revised the estimate needed in the second year, you would take what you already got, subtract that from the total and bid -- so a quarter would remain, and so forth.

I think this kind of adjustment mechanism would minimize, though I freely admit not eliminate, the estimation errors that plague the interpretation of PURPA.

Once the bids were awarded, the cost of payment would be collected by the RTO from the market participants, most logically from load-serving entities, and held in escrow until the plant began delivering energy at rated capacity during the year for which the bid was awarded. In my example they'd actually get the money in 2007. If there's sufficient concern about supply diversity, bids could be done by plant type with reservations for those run by fuels other than gas, or whatever fuels seem to be threatened, and frankly, this might be a political as well as an economic call. The Commission could combine the system with a cap on bids for energy and ancillary products to be in force whenever there is a declared shortage which would normally be the opening four or something similar.

If generators know the cap is in force, they will adjust their bids for commitments and build or maintain capacity accordingly, and should not be able to complain that they cannot recover capital costs from the market. I tend to favor this kind of triggered cap, because I still have not figured out otherwise how to limit prices to what, by anybody's definition, would be economically appropriate in periods of scarcity.

As the Commission is aware, generators know they must run for reliability purposes; bids are constrained only by the bidder's patience to endure political embarrassment.

There are, of course, variations of ICAP capability markets that in concept tend to converge with the approach I've described. If ICAP payment is linked to a particular delivery at a particular time, and is coupled with a fixed price call option on energy, the effect of the models are somewhat similar. Moreover, I don't pretend the specifics of what I propose would clearly produce the best possible capacity market.

The model, I think, does have some virtues, including built-in adjustments for changing conditions. It looks far enough ahead to ensure there's sufficient time to build the needed facilities, provides the security of a future source of cash to allow financing for plants who may need it, gets the money to the people who will be providing the capacity when and where needed, and not least, provides a structure under the supervision of the Commission that will assure the public the regulators and RTOs are actively ensuring that the lights will stay on, not just today but next year and the year after as well.

THE HONORABLE WOOD: Maureen?

THE HONORABLE HELMER: Thank you, Chairman. I'd also like to talk about ICAP and our experience in New York, and I'd like to spend about two minutes talking about what we've seen as some of the positives and some of the negatives, and at that point I will have totally exhausted my knowledge and understanding of the subject.

There are some differences, I think, in the way ICAP is administered in New York, and I think there are some pluses in the way it's administered. Having said that, there is a working group that is working between PJM and New York and New England, because admittedly there are problems in each of the regions, and I think at this point they've been trying to see what is the best practice with respect to ICAP, and to try to move toward it. So as I discuss this, it's with the understanding that a lot of these issues are still under review.

I would agree that there is a problem when the economics of ICAP or, excuse me, capacity shortages, collides with the political, but I would also argue that it collides with the engineering, and I'd like to get into that as well.

First of all, let me just give you a brief explanation of how ICAP works in the New York ISO. An LSE has to provide for 118 percent of their projected needs. If that LSE does not do that, he has two choices: he can either go into the ISO-sponsored auction, or he can pay a deficiency charge. The deficiency charge, which is somewhat, I think, close to what Tom was talking about, is approximately the price, with a reasonable incentive, that it would take to build a new peaker. So it is a de facto cap, but only on the capacity side. It's not an energy cap.

On the generator's side, once a generator has agreed to provide ICAP, that generator has to bid into the day-ahead market every day. Now, it does not have to bid into the market at a particular price, and so if the price that that generator bids in is not accepted, that generator is free to sell outside of the ISO. Having said that, I think it makes it clear that the role of ICAP is purely for reliability. It's not intended to be a price control mechanism. It is strictly there to make sure that machines are there when they're needed to be there, when they're called upon by the ISO.

The question has been raised does this, in fact, ensure investment in new generation, or is this just a payment to old players who have been here historically. And I would argue, and I think, certainly the generators in New York agree, that without ICAP payments to cover some percentage of their costs, it would be very difficult to fund, to finance peakers in New York State or, for that matter, anywhere. If an ICAP -- if a generator had to go into the market, into the energy market to cover its fixed costs and all of its other costs on two or three or 30 or 40 days a year, the prices that it would have to bid into that market would be very high. Presumably, if you were going to get rid of the ICAP market, you'd almost certainly have to get rid of the $1000 per megawatt-hour cap that's on the market.

And if these engines were to go into the market and bid at, for example, $10,000 a day on the small number of days for the year that they have to recover all of their costs, that would send the market-clearing price for everyone through the ceiling. And in New York, when we have serious days where prices go very high in the energy market, we are talking, in a single day, hundreds of millions of dollars. So this is no small potatoes.

Another point which I don't think has been covered so far is the fact that the ICAP process does allow for the orderly and reliable scheduling of maintenance outages. This might otherwise threaten reliability, especially in times of short supply, as we have right now. And this is true not only for the summer peak periods, but also for the shoulder periods of the spring and the fall, which are very popular in terms of maintenance.

One of the concerns that I think we do have in New York and which has been alluded to by, I think, both of the previous speakers is the issue of market power. We do remain concerned about market power in New York with respect to ICAP. We've seen at least one incident which, at least there was a suspicion that market power was asserted.

A couple of points in those regards. First of all, as I mentioned earlier, the deficiency price does act as a de facto cap with respect to this. And so it is incumbent upon the ISO to make sure that the deficiency price is a reasonable price, again with sufficient economic incentive for the building of new generation.

The other issue, though, is that if market power is exerted in the ICAP market, then it is, first of all, easier to detect, and second of all, the impact, because it's not on the energy market, is not as great.

In New York, we have gone actually to what's referred to as a UCAP. We talk about ICAP generically, but a UCAP, which is similar to what's used in the PJM area, is actually ICAP adjusted for a generator's forced outage rate. So this gives a better sense of exactly how available that generator is over the course of the year, and then rewards that generator in a proportional manner so that you are paying more for ICAP for machines which are more reliable and less for ICAP for machines that are less reliable.

And so what this does is for someone under a UCAP system to gain, they have to essentially affect their behavior over a 12-month period, because UCAP is based on -- a determination of what their forced outage rate is based on an historical 12-month period. So they would essentially have to affect their behavior over that 12-month period, as opposed to, in the energy market, where a generator can just take a few key days to pretend to be out or, you know, whatever they happen to be doing to take themselves out of the market. And again, that -- those couple of days can mean hundreds of millions of dollars in terms of impacts on consumers.

With that, I will turn it back.

THE HONORABLE WOOD: Thanks, Maureen. Dick? I'm sorry. I missed Dave Mead from our Staff also when I was introducing.

Dick from Washington.

THE HONORABLE HEMSTAD: Thank you. Loretta Lynch and I are what are called the survivors of the turmoil in the West for the past couple of years. That is, both of us on the panel here today. In the West, that turmoil has resulted in consumers who have been sorely abused, utilities, both the publics and the investor-owns, have tended to destabilize, and with declining creditworthiness across the West, reliability has been undermined, and literally billions of dollars have been sucked out of the western economy with no benefit. So that's where we find ourselves as we move down this transition to a new period.

If I have any cautionary urge, to the Commission, it is to say you better proceed cautiously, with significant warp speed, to change. We have to get some sense of normalcy back into the regulatory environment with the utilities that we regulate, and therefore, I think incremental rather than revolutionary change ought to be the framework for the general discussion of where this industry goes.

I can't speak to the rest of the country. I think I can speak generally about the West, more specifically about the Pacific Northwest, and quite specifically about the state of Washington. And so my comments really are looking at the West, which is an interconnection that, for all practical purposes, is disconnected from the rest of the country, and the issues there can be quite different from what you find in the rest of the country.

But in Washington, we continue to have the traditional model of retail utilities, that's public service companies, fully bundled, that plan for and acquire physical and contractual resources to meet their retail obligations. I have read the Staff paper, and at least to me it is unclear whether it is addressing -- in addressing question of capacity reserves, if it is addressing operating reserves or planning reserves, or whether it is addressing once again the other -- operating reserves being the issue of the security of the system for reliability. Planning reserves, the longer-term ability of a utility to meet its retail load obligations.

Now, Washington and, I think, essentially the entire West is not a part of the tight power pool as is to be found in the East. In the Pacific Northwest, we have a hydro-based system that is most limited by energy production, and it is not capacity limited. The Staff paper seemed to focus on issues relevant to the tight power pool, pools of the East that are capacity-limited.

Now, with regard to the operating reserves, at least in the west, it is addressed by the reliability council, the Western System Coordinating Council -- now we've all been in the Western Electric Coordinating Council -- and that affects the standards applied in the entire Western interconnection.

The standards are applied by the control areas, many of which currently are the retail load-serving entities. The standards historically have been voluntary. The West has evolved into a contractual system for mandatory imposition of sanctions, and of course, I can't address as to FERC but rather to Congress. The one thing Congress could and should do to enhance the reliability of the system is to pass legislation that allows the mandatory imposition of reliability standards with sanctions that can be imposed.

On the other hand, planning reserves in Washington and, I think, throughout most of the West are the responsibility of each utility. In the Pacific Northwest, the power administration fulfilled that function really for the small publics and the PUDs, as they addressed that question of load growth. The investor-owneds and the large publics do their planning reserve analysis, and they arrange for physical or contractual resources to meet the loads and -- their growing loads. And it seems to us that this utility role is quite appropriate.

The utility has the legal obligation to serve its load and to build or to buy whatever resources that are necessary to meet that obligation. And in the Pacific Northwest, both utilities and nonutility developers are currently building new generation, and this seems to us to be a healthy mix. We also have the Northwest Power Planning Council that does regional planning for both the supply side and the demand side to aid utilities in their resource decisions that they make.

Now, the punch line here, it seems to me, giving the planning reserve responsibility to some new regional entity, presumably the RTO, would only add confusion and undermine the utilities' responsibility to arrange for sufficient capacity and energy resources. RTOs -- assuming they are going to go into effect -- have responsibility for transmission, operation, and adequacy. They do not have, and ought not to have, responsibility for generation adequacy. So I would encourage "one size does not fit all" approaches to assigning reserve capacity to the RTOs or other regional entities. And if that were to be done, that would be unfortunate. I don't see how it would be workable in the West.

The Staff paper also discusses demand response issues. Our consensus is DSM definitely works. Our utilities carried substantially reduced load in the critical period we went through in the last year. Programs were implemented by the utilities after review and approval by the Commission in our state and in other states. It seems to me this is fundamentally a retail issue, in coordination with other utilities is beneficial, but it should stay a retail service issue.

There's been some suggestions in the past couple of years that there ought to be a broader market for retail customers to offer demand reduction as a wholesale power product. I just simply emphatically say this is not to us a good idea. Retail customers have nothing to sell to third parties. They may have something to sell back to their utility that is providing that bundled service, but even if you can get over that hurdle, it seems to us to undermine a utility's ability to plan and operate its system to meet its load, for example through buy-back programs, if that is appropriate to deal with demand response.

So just some comments -- I'm not going to answer all of the questions, because I think my description answers various of them. But the first one, whose job is it to ensure reserve adequacy? To us, the answer is the utilities, with the oversight of the state and, in the case of public utilities, local regulators. There is no need for a new federal role, and there is no need to pass this off to an RTO. Again, RTOs are supposed to deal with transmission, not generation.

Jumping down to question 5, which talks -- addresses -- asks the question about an adequate, apparently region-wide, demand response program, which I don't think, at least in the West, is and our response to that, it seems to me the question is wrongly asked.

A better question might be, should the demand response resources count toward compliance with an operating reserve margin standard? The answer to that question is yes, so long as they can be dispatched with the same certainty as physical or contractual power resources.

And so what is the appropriate balance between demand and supply resources in meeting long-term and short-term reserve requirements? Again, there is no single answer. The mix depends upon the cost and the characteristics of the resources. This is why utilities do the planning for a resource portfolio. State regulators review the decision utilities make based on the plan the utilities develop.

Again, there seem to be some confusion about what the reserve requirement means in that question. If the RTO become the region's control center, that -- that would likely seem to be the case -- it would need to come up with the most economic and reliable mix of supply and demand resources to meet operating reserves. Again, the RTO should have no role in the development of planning reserves. The RTO is supposed to operate transmission, not generation.

Finally, how much excess reserve is enough? There would seem to be no perfect answer to that question, but the reserve requirements for operating reserves set by the reliability councils, at least as it has worked in the West for the past 35 years, seems to have functioned reasonably well.

THE HONORABLE WOOD: Thank you, Dick. Diane Munns from Iowa.

THE HONORABLE MUNNS: Thank you. I think I'm going to have some disagreements with some of the things you said so that might start the debate.

I tell people I started in this business in 1983. We had six or seven Iowa-owned, Iowa-based utilities. They all started with the name "Iowa." They owned their own generation. They had a 15 percent reserve. We had MAPP involved. They did coordination to ensure reliability. We had a really nice system that worked, and we had excess capacity. So life was very good for all of us.

We've had four major events happen since the early '80s. We've had the wholesale markets open to competition. We've had a consolidation of our home-grown, home-based utilities into regional and national players. Some states have restructured, other states haven't restructured, and our excess capacity is gone.

So when I look at this overall question, I think the question is not do we need to have adequate reserve margins, but how do we ensure those in light of the changes that I just talked about, and I believe that this is not a state-by-state issue, but a regional issue. I also believe that it's not a generation-only issue, but also a transmission issue, a new technology issue, and a demand response issue.

With respect to generation, our generation needs are being looked at by individual states and not by the region. That's traditionally been our role. We want to make sure that the residents in our state will have adequate capacity. So we each, as a state, push to encourage that generation is built. But we don't know how much is currently being proposed and will be built in our region. I know what's going to be built in my state. I don't know what's going to be built in the other states around me.

As I said, I'm not sure we have a good handle if we look at these as regional markets. We may come out of this with excess capacity, like last time we went through the building in the late '70s and early '80s. Maybe that's not all bad, but we have to look at who will pay for that, and will states who have not restructured pay to assure that there are reserves in those states that have.

Next I want to talk about transmission. I don't think any of this works if we don't have the ability to move the power regionally to make the best use of our reserves, and that means building transmission lines and streamlining our procedures so that we can get transmission built in a timely manner to figure it into the solution to the problem that we're talking about here today.

There's also new technology solutions to this capacity and reserve issue, such as distributed generation, and finally, the other thing we've been discussing here, which is demand response. Sending price signals to control usage and the ability to shed load as a part of our reserve margins is a valid part of the solution to ensuring reliability. I believe all this points to the need for regional approaches and regional coordination. Now, the way that we're set up is we have a federal government and we have state governments. We do not have regional governments. And I want to be very clear here, I don't think this should go to Washington, but there will be, and there currently is, a push to federalize this system. There will be a push because there will be a desire for standardization. There will be a desire for one-stop shopping, one forum, and also for speed in getting all of this done.

But one thing I do agree with Dick on is that there are local and regional differences that can't be captured if decisions go to Washington. So I think now is the time for us to learn how to act collectively within a region to share our jurisdiction in order to design regional solutions. The FERC that we have here today wants to set up a cooperative relationship, federal/state relationship, with us so that we can leverage all of our capabilities. I think the regional panels and discussions like this are the first step but that we need to institutionalize processes so that we can collectively work on these issues regionally. Capacity reserves should be one of these issues. I think it certainly is a solvable problem, but it should be approached on a regionwide basis.

THE HONORABLE WOOD: And last but not least, Loretta Lynch.

THE HONORABLE LYNCH: I just want to know, since we're the winners of the Survivor, Dick, whether we get our million dollars. All I know is California keeps paying.

THE HONORABLE HEMSTAD: We'll split it.

THE HONORABLE LYNCH: I concur in Dick's

comments in most respects, and I would caution everyone to, before we make huge statements, to learn from the lessons of history. Certainly I was not involved in the California restructuring experiment from '92 to '96, but I have been involved in the mopping-up effort that that restructuring experiment has left us. And when I go back and look at the promises and predictions and projections that my predecessors and others in California made in that time frame, you just have to want to honestly shout to them stop, don't you see this pitfall and don't you see that pitfall, because it was all supposed to be Nirvana we're going to have 400 ESPs and all sorts of energy providers in California, and that's not how it worked out.

And clearly, when you read the legislative history of the Federal Power Act, I see it solely parallels from the markets of the '20s and '30s nationally to the markets in California in the late '90s and the early turn of the century, that I want to take those legislative history books to the folks who designed our system and say, did you not read this before you put the system in place? And then, of course, when you look at all the projections in both California supply needs and capacity abilities for California over the past decade, all the ones that have been projected over the past decade, it's clear that everybody was off the mark.

Nobody foresaw the growth of the Silicon Valley and the electricity consequences of that or the advent of the ISO and what that meant or the success of California's energy efficiency and conservation measures.

So I would just caution everyone, when you're doing long-term planning, the California experience has been you gotta make sure that you plan in adjustments as you go, and I'm becoming much more of an advocate of incremental change rather than major market change so you can stop the runaway trains before they all collide at the station, which is really what I think happened in California. And that painful experience really does, I think, cause all of us, and certainly California policy officials, to examine the myths of the California market and what happened in California so we can understand what really went wrong and how to fix it.

When I look at how we need to fix the market, I come to the -- what I call the "hole in the bucket" problem. We've got this big bucket of supply, and everybody says if you just pour enough water in the bucket to fill it and maybe fill it to overflowing, we'd be fine. The problem I see is we had a hole in our bucket, and that hole was caused by either lax market rules or market manipulation, whatever you want to say, but the hole went from a pin prick to a gash. So we kept filling supply, California did a great job in both demand-side management, energy efficiency, and additions to supply, such that we had 47,000 megawatts of installed capacity last summer, not counting the munis which had even more in excess, and our peak last summer was at 41.1, 41,000 megawatts of peak demand, and even then we had problems, even with that kind of reserve.

Now, just an aside, the Energy Commission in 2000 was projecting that we need 55,000 megawatts for 2001. So you can see how far off that projection was off only eight years ago. What do I think happened? I think withholding happened. You can have a totally filled bucket, and if you've got folks withholding power, then it doesn't matter how much you pour into that bucket. Frankly the FERC saved California with their order last summer, because that helped set boundaries to at least the withholding problem that we experienced in California, and of course, the blackouts that California experienced did not occur at times of peak demand. Our blackouts occurred in December, January and March and May, certainly at times when we were less than 40,000 megawatts of demand.

So we had a lot of supply in those periods of time. The problem was the way the market was structured and the ability of folks to keep their power off the market such that even though we should have been totally covered, and at times we had blackouts when we had 30,000 megawatts of demand, and we have 47,000 megawatts of installed capacity. That should not have happened in a functioning market. So when we talk about how do we make the market work and how do we ensure adequate supply. One way is to make sure that the stuff that can run does run, or that the things that are already built actually provides capacity into the market rather than gaming into the market. Many people argue, of course, that long-term contracts are the answer, and I'm here to tell you long-term contracts are not Nirvana, and just be careful what you wish for because you may get it. In fact, in the height of -- when California had a gun to its head before the current members of the FERC intervened to provide appropriate boundaries to our market, California was signing contracts where we were going to pay five to 10 times the cost of building a plant, five to 10 times the cost in capacity payments alone. At that point, I think everyone would agree, that that is not a solution that's going to work for anybody's economy.

So what do you do? How do you reshape that bucket and patch up the holes? From my perspective, and when I look at what went wrong in California, clearly one of the big problems was that the state stepped back in the '90s from molding and shaping the size of the bucket and just said hey, we're not going to do that, someone else is going to do that, and it was only when the state stopped integrating our transmission needs with our energy efficiency programs with guidelines about how and when and where to build plants and what kind of plants, that's when it started to fall apart in California in terms of capacity.

That's when people started gaming the building system in California, and many people have argued that it's really the environmental regulations that contributed to a lack of supply in California, but in the '80s, under the same environmental regulations in California, we built 18,000 megawatts of supply, and in the '90s obviously we built much, much less than that. I would argue that it was really the state stepping back from its appropriate and proper role in designing integrated resource management planning and also in making, ensuring that we had adequate transmission systems that contributed to any possible lack of supply.

So I think that the questions that were asked in the Staff paper all point to what is the FERC's appropriate role in ensuring adequacy of supply, and I'll say obviously, one of the things I'm the most grateful for is the role that FERC has already played in the must-offer order and in ensuring that folks who have supply, in fact, use it and California needs it. But I believe that the most preferable role for FERC is in essentially the protector of the shape and size of the bucket, meaning that no matter who has the responsibility for obtaining supply -- and I agree with Dick that that responsibility should be placed most appropriately on the utility for all the reasons that Dick articulated, I do think that FERC must ensure that the bucket stays strong and there's no hole in the bucket through preventing seller's side market power, through preventing the kind of gaming that may well have been allowed in the California market or the arbitrage opportunities that may well have been allowed in the market.

So it's clear that anybody, every market needs a market cop, and I just -- once again, I know I thanked you all before, but it's very clear to me that what changed significantly in California's market was actually not the building of the extra 2000 megawatts or the phenomenally successful energy efficiency measures that California implemented this last year. Those helped, but what really contained the California's market was the Chairman and Commissioner Brownell and the other FERC commissioners, Commissioner Breathitt and Commissioner Massey stepping in and bounding the market appropriately as the market cop. From that perspective, I think that is the highest and best use of FERC's role, as we've seen in California in terms of adequacy of supply. We can have as much water in the bucket as we want, but if the hole's big, it doesn't matter, because you can't ever fill a broken bucket.

THE HONORABLE WOOD: At this point, I thank you all very much. We'll kind of pick up on that in a second. If there are, from our state commissioner colleagues, any other thoughts other than what the panelists here have thrown into the mix before we start, I'd encourage you to come up to the mike, the state commissioners, if you have any other thoughts on the capacity planning obligation or any other thoughts you might have heard. There is --

THE HONORABLE DWORKIN: Well, this one I actually do come to, if you will, praise FERC and not to bury it, because in all seriousness, I think that over the course of the last year, some very good things have been done and faced, and I want to begin by saying that a forum on this topic in this place is a great, good thing.

As Maureen said, in a straight dollars and cents way, this is an area where you can move hundreds of millions of dollars in a day, but one afternoon a little while back when New England hit $6000 a megawatt-hour, there was more money at stake than all of the issues of seams, all of the issues of standardization, all of the issues of transmission investment. Here is where the real dollars are, and it lies in the intersection between capacity, capacity shortage, withholding, and where the market price goes.

The pragmatic fact that when FERC took a laid-back, hands-off attitude toward the wholesale market, the prices rocketed, and when it indicated that it was going to enforce one way or another some mechanism of just and reasonable rates, prices were controlled. It's a phenomenon in which billions of dollars have been affected strongly and positively. The active role of understanding that markets need rules and that rules need enforcers is a phenomenon that nobody can or should escape from, whatever the individual desires we might have to all do our own thing.

Moving from that to the capacity issue, I want to suggest that the Staff paper in this case puts the finger on some very important, pragmatic things, such as the distinctions that Tom and Maureen both mentioned, between rewarding bringing on new capacity as opposed to paying for what's already in the ground. It means a necessity to recognize that bilateral contracts are going to go only so far in solving this problem, because, by definition, the reserve capacity is the thing that we want to have when it's not running, and by definition it's the thing that a user doesn't want to pay for when it's not running. So markets aren't going to solve it in a bilateral way, because the thing needs to be in the background for all of us. It is, in a very real sense, a common good, a general good, something that needs to be established in an overall approach.

The mechanics of the New England ICAP is something that all of the New England commissioners had expressed pretty strong concerns about. The goals of it, though, are a thing that we also agree are very attractive.

The one thing that I want to add is that FERC can take a special role here, in part, through the kind of commitment you've made through a serious market monitoring unit, which I see you anticipating, not with a few people like some of the ISOs have or a couple dozen like most of them have, but with 50 to 100 to 150 people who can take a serious look at it and turn it into something real and meaningful, and the other thing is that if you're going to be taking that role seriously, integrating it in a coherent way with the other policies that you adopt is vital. There needs to be a conscious consideration of when to modify potential transmission rules in order to make sure that capacity that is available can be used, when to have some kind of locational pricing that sends a signal to put the capacity where it will be useful instead of, as Tom may well be aware, in Maine, on the wrong side of the constraint in the New England area.

The function that you have of knowing that the effectiveness of price signals reaching end users in time to give them a signal about what they do and don't want to buy before they make an irrevocable commitment to flick a switch and get it is something that you need to do, because the measurements of capacity that merely say here's a trend line into the future, let's not assume there's any chance to influence it, will lead to the kind of buying of capacity that doesn't do you any good, as Loretta talked about, when there are a lot of cheaper ways to meet the need if you recognize that that anticipated demand line is a variable that you can influence through your -- and collectively we can improve together.

THE HONORABLE WOOD: Anyone else? Feel free to walk up later. It's not now or never. I thought that this would be a good time to do that.

I certainly recognize the different markets and the overriding different states of development, but I guess the core issue, I think, Dick, you went to at one level and certainly one that's kind of been making me scratch my head for the past several years as I've looked at reserve margins and thought about how does interruptibility on the demand side factor in that. You mentioned -- and I didn't write it down fast enough, but you mentioned some characteristics about demand side resources that actually could count toward, say, the 15 percent number.

How would you characterize that again?

THE HONORABLE HEMSTAD: Well, it seems to me the demand side can be used to meet the reserve requirement if it is quickly dispatchable or applicable so that that particular utility can meet its security requirements, but it has to be firm. When I say "firm," I mean be able to impose, just in the same way that, say, new or reserve generation can be brought on. You can have demand decline brought on if it is appropriately structured.

THE HONORABLE WOOD: Let me use this opportunity to do a little advertisement for the third of our series of panels of the states this week is the demand response conference on Valentine's Day. That's why it's in red, folks. We have good PR folks at the Commission. It's all day over at the Washington Convention Center. We're going to talk a little bit about this, but certainly because today I think y'all brought it pretty close, as did one of the Staff questions about how -- is it always higher than the ground we're talking about here as far as the insurance that we need, and I think, Dick, you answered that question and sure got me thinking back on that issue.

Are there any thoughts on this from other parts of the country. Susan?

THE HONORABLE WEFALD: Well, in our MAPP region right now, its actual load-shedding demand that can only be counted. For example, wrapped water heaters don't count on this, but if you have an interruptible system where you can turn off air conditioners at times of peak demand, that counts. So I think there's simple distinctions that can be made here that are workable already in different parts of the country that are being counted toward the -- whatever percentage of reserves an area thinks is appropriate.

THE HONORABLE WOOD: Maureen?

THE HONORABLE HELMER: I would just say for the New York ISO, I think the intention is once some of these programs have a track record so that a utility can look forward to the summer and, you know, look for a certain percentage of load to be dealt with through a particular program, they will do that.

The other thing though, is that for the most part the programs in New York are for large commercial customers. Until you have sophisticated, either integral meters or, as was pointed out, some kind of mechanism which really is automated so the utility really can depend on it, you're really not going to go too deep into the load. Our economists have done studies in terms of how much demand response would allow for a higher amount of market share, if you will, by a generator where they can exert market power. And just purely for illustrative purposes, a negative .05 price of elasticity for demand of the market, if you had even 3 percent of the market, you can exert market power.

Again for illustrative purposes, last summer New York's demand response was only at negative .01. So, you know -- and that's with fairly -- that's 1500 megawatts of large commercial customers participating. So you really have to have fairly deep penetration into the demand market before you can really have an influence on market power, but it is a very important component.

THE HONORABLE WOOD: Historically, we've seen the power industry use instantaneous interruptibility just for reliability purposes so that that flip of the switch, dropping off the system, just a stabilizer frequency or otherwise restore the power grid, but now that we're talking about in this context the balance of linking it to an economic trade-off, it does become a lot more complicated. Tom, I know some of the thoughts you put forward in your seven-step program for fixing ICAP kind of lead me to think along those lines.

At the end of the day, what is the impact of such a program, costwise, on the retail customer? Have y'all thought about how this actually -- I mean, you're in the unbundled states, too, but it would be true in a bundled or unbundled state.

THE HONORABLE WELCH: The problem is it doesn't really address the question of how you value and how you count demand side sources. In fact, you can ignore them completely for setting up a particular model, but demand side overlays on both the long-term -- you know, "how soon do you have to start building capacity for five years from now" question and the short-term operational reserve issues.

In both the way that -- you approach it a little bit differently. If you're looking out into the future, for example, the model I described trying to figure out how much new generation you need coming on, whoever is making that decision does have to do some analysis of whether transmission constraints will be removed and also some analysis of whether demand reductions will substitute at that future point for generations so you don't have to buy new generation.

In the nearer-term operational reserve

requirement issue, I think the question really is a very difficult question which we have not yet solved in New England, is how you get sufficiently instantaneous price signals to customers who would choose to drop off the system instantaneously so they can be treated just like dispatch generators. Right now, there's a fair amount of load, paradoxically most of the load in New England is signed up for demand reduction as a name where you don't need it because you're on the wrong side of the constraint.

But I think if that problem can be solved so that you can treat demand as just another resource, I think you can have some, you know -- on all of your reserve markets, you can have some pretty dramatic effects. But I don't think even if you solve that particular problem you simultaneously, say, complement and solve long-term capacity problems. I don't think you can assume anything about your future capacity needs. You just have to take demand into account as one of the three factors.

MR. KELLY: Several of the Commissioners talked about roles, who should do what, and I wanted to focus on that a little bit. I can think of four things, at least, that need doing, and then the question is who would do them.

One is somebody needs to say there is a reserve requirement for the region. It could be a regional reliability council. It could be FERC. It could be the states acting collectively, if it's a region that encompasses more than one state. It could be an RTO, and maybe it could be something else. Then if there is a requirement, somebody has to say here's what it is, it's an 18 percent reserve margin or one day in 10 years, and you could list the same cast of characters who might do that, say, states acting collectively, FERC, regional council, RTO, et cetera.

Then it comes to a question of enforcement. If the obligation is on a load-serving entity and it doesn't meet the obligation, who enforces the obligation, because if one entity doesn't, it will inevitably draw the reserves of those who met their requirements, even if they're in other states. And lastly, there's the question of whether somebody should establish a market where people can buy and sell reserves.

So those are four different -- that's a long question with four components, but I guess the point of the question is that it's not quite, to my mind, just a federal/state issue. You could say the answer to the one question is FERC and the other question is the states acting collectively and another question, the answer is the RTO, et cetera.

Any comments on that from folks?

THE HONORABLE WEFALD: What has made this issue very difficult, even in the last six months -- I will just relate to my personal experience in trying to keep track of this issue -- was first I found it unable to map our region to talk about capacity reserves, and I thought that that's where I should go until about September when you came out with your policy paper. And then I thought well, I should go to the people who are organizing MISO, our regional -- the proposed RTO, because I was told that the discussion had switched from the NERC reliability region and was now being addressed at MISO. All right, so then I started thinking about how you would work through that organization and perhaps approach this.

So then I come to this meeting now, and I'm told about in December that the FERC has put together reliability into the -- well, FERC hasn't done this yet, excuse me, that FERC put out a paper in December that suggested that there should be this standards council and that now reliability is being considered by that standards council as a part of its work, and that will be presented to the FERC in another month, I think March 15th.

So now I don't know whether I should refocus my efforts on MASB, instead of focusing on MISO or instead of focusing on the reliability region. So in six months, I've had to be thinking about an approach to three different potential organizations, and I've gone from one that is somewhat regional in nature involving seven states, to one that I thought maybe would encompass, was it 12 states and MISO. Now I'm thinking about I have to deal with this on a national scope. You can see how difficult it is for us to try to keep up, and when Dick Hemstad mentioned perhaps there should be incremental changes here on an issue as large as this, I could only nod in agreement, because it's so difficult to try to keep up at this time on such an important issue to the whole country and all the consumers.

MR. KELLY: Commissioner, if you could be Czar and decide who you should go to on this, what would you do?

THE HONORABLE WEFALD: What you're saying is you would welcome suggestions from the Commissioners about where we would like to deal with this?

MR. KELLY: Yes.

THE HONORABLE WEFALD: All right, I will think about that for a couple of minutes.

THE HONORABLE WELCH: I think this goes back to what they said. The answers to the question is different depending upon what your market is and who you are dealing with. I was listening to Dick's comments, and he was describing a situation that even if I thought overnight, I can't get to. I don't have utilities with obligations to serve. They don't exist. So it seems to me one way of approaching the question -- there's sort of two questions here. One is, who decides what level of reliability, per se, is needed in a particular market? And the answer to that question might be different than the answer to the question of who is it that decides what the market rules are, the enforcing mechanisms are. Those are two very different questions.

For the second one, at least -- for the first one maybe a national standard makes sense, maybe it doesn't. For the second question, it seems to me that the size of the entity or the geographic scope that the entity represents that makes the decisions about how the market capacity works, how it interacts with the energy market has to be at least as large as the size of the geographic market you're looking at. I don't think it works if you have a New England market and a state decision on those subjects. It might work if you had a New England market and a FERC decision on the subjects. But I think I agree with Diane that the best model is one in which the two geographic areas are congruent, where you have the group that is making the decisions about what kind of capacity market rules you want is in essence the trading area, and if that happens to coincide with the RTO, which I understand the Commission may want to achieve, that makes a certain amount of sense.

The subsidiary question is, how do you get governmental input? And I think governmental is important here. I don't think for political reasons you want to have some governmental backstop to this, whether you could have something less than FERC but more than a state, actually some formal authority here is a political question, but my sense is, to answer your question directly, it has to be, for New England right now, it would have to be nothing smaller than the ISO to make those decisions.

THE HONORABLE WOOD: Go ahead, Dick.

THE HONORABLE HEMSTAD: If I can just make the general comment. Again, in the West, very different from the other parts of the country. I think the solution is simple and eloquent, and we don't need a new institution to do it. To answer the question, the reserve requirement for the region should be one, yes, the entire interconnection, the reliability council does it. Who enforces it, the reliability council either with some legislation from Congress, and it should be a market for buying and selling reserves. If there can be one, that should be the responsibility of the utility as it sits there and balances the supply and demand.

If I can make a general comment, Puget Sound Energy, this is in a bundled retail state, no competition, has now deployed a million meters that allow either time of use or real-time pricing. So you don't necessarily need competitive retail to deploy this kind of new technology.

THE HONORABLE WOOD: Loretta?

THE HONORABLE LYNCH: And I have some questions based on Kevin's questions, because they assume -- I guess they assume certain facts that I don't know what they are, including 15 percent of what? What are we talking about in terms of reserve, and when is that measured? Do we measure today for reserve for the next summer? Do we measure it for 2005? What are we talking about in terms of our baseline base case, and what assumptions are we using when we get there? What hydro conditions is that based on? What weather conditions is that based on? Are we building for a one-in-50-year heat storm, or are we building for one-in-100-year, one-in-20-year, one-in-10-year, all those kinds of questions, and how does that going to relate for California? Because you can assume heat storm costs in California but you need to look at the historical incidences of when that has ever occurred.

Usually what's occurred in California is a heat storm in a regional. So then isn't that a question of transmission capacity rather than a reserve capacity. Of course, then it's reserve of what? Is that available to be run? Installed in the ground? Or is that just available in the marketplace today, because California's exports quadrupled in the last two years. So all those questions, I think, need to be answered before we get to the question of who sets a 15 percent reserve. And then the other question that you asked, Susan, I would love to be able to answer, which is if you are czar or if I were queen for a day, while I have often wanted to be queen for a day, especially in California where I could just wipe away the seven different entities that deal with California energy and impose my rule on California -- I know many in the audience think that is what I'm trying to do -- I now understand most emphatically that I am not queen for a day at all, and that what I can do is bounded by state law and court precedent.

And so I think while it's an interesting question to ask, you have to ground it in federal law, because whatever we all would like, federal law and FERC precedent controls, and that's where we have to go back to the fundamental before we can -- I guess it's a theoretical exercise, but I would much prefer the policy endeavor of what is allowable under federal law and then, in my case, what is allowable under state law and take it from there.

THE HONORABLE WOOD: I will give at least a thought here in reaction to, I guess, Dick and Loretta since y'all have been out in the West. Nora and I both came into this, and one of the questions that as a state regulator in fact that I was asking was, who was keeping and who was the responsible adult for the whole West?

Loretta, you can't watch California and expect that all the rest of the states are going to -- and the same thing goes true for Dick, and I guess what we're looking for in this process is who is going to be, going forward, that person that asks all the questions that Loretta just asked: What about a heat storm? What about 15 percent? What about, you know, maybe the ages of -- certain generators being available at all? If it's in the ground as long as it's not corroded, but it's hard to count that. Can an RTO do this? And if the West is split up into multiple RTOs, is there going to be a succeeding or some body yet to be formed, is there some responsible adult that isn't in Washington and is more than the state capital available out there that can do this stuff and ask those engineering, you know, basic questions and then overlay on that the decision that maybe a collective group of Western or Midwestern or Northeastern or Southeastern regulators say, you know, from a policy basis, we think we ought to have a cushion of this much, but that's kind of our policy that as regional regulators we want to do that.

THE HONORABLE LYNCH: Well, you know, we used to have a system they tell me that used to work well, the -- the Western Regional Council. Before California went out to the races in this roller-coaster experiment, we had a system where states maintained their sovereignty but worked together and planned together. It was only when California stepped back and for ideological reasons stopped planning in its own backyard and stopped building and, you know, doing the transmission upgrades it needed in its own backyard. When California instituted a bigger than my neighbor kind of market system that encouraged the rest of the Western states to come in and profit off of California's problems, did that kind of system break down?

So I think implicit in your question is an assumption that the states actually can't take care of themselves, and at least for California, which is huge, I'd at least like a chance to kind of fix some of our own problems, and perhaps participate, for instance, with Washington. In the systems we used to have where everybody had a respectful relationship rather than a kind of "put all the cats in a big black bag with a fox" relationship and see who came out.

THE HONORABLE HEMSTAD: Again, in the West -- in the Northwest, we've even managed through our severe drought last year, I think, relatively easily even though it was the worst drought in 50 years. What we could not manage through was the dysfunctional wholesale market over which we had no control at all. That just created absolute chaos in the West. But, you know, the worst drought in 50 years and we could manage that, I think, reasonably effectively, with some pain, through our demand response mechanisms and the like, and life would have gone on relatively easily, but it was the wholesale market that killed us and killed the entire West, and it was only until FERC stepped in finally that we got some semblance of order back into the system.

But I don't think that system that worked well for years has disappeared. We still have a Western Reliability Council that is a collective mechanism in which everybody participates that's able to set the short-term security requirements, and then is imposed down through the system. It is both -- it is cooperative and ultimately hopefully mandatory, and with that, the system will continue to work for us. Again, other parts of the country, obviously are very different.

THE HONORABLE MUNNS: I would just reiterate what I said before. I just don't think it's life the way that it's been. Once we opened up those -- the wholesale market and we had all the reorganization and consolidation of our utilities and the fact that we have states that are restructured and other states whose markets are closed gets us to a situation where we have to look at new and different ways at handling this. It is a new system. We can probably take some of what we did before, but we're going to have to apply it in light of these changes that are going on out there.

Now, you talk about whether the RTOs can do it. Over time, they can probably do it, but right now they're having a hard time just getting done with what's on their plate as it is. And this is all at a time where in this country we're putting generation on. We're not going to have the luxury of sitting down and making out a nice big plan of how should we fix our transmission constraints and where should we put on the generation, where is it optimal. We're going through a cycle right now we're going to put generation on, and it's probably not going to be the most efficient, as if we had had the opportunity to do all of that. Yeah, the RTO can probably do that, but they're certainly not in any position to take that on as another duty right now.

THE HONORABLE SHOWALTER: Marilyn Showalter, the chairman of the Washington State Commission. And Chairman Wood, I wanted to answer both of their questions but backwards, that is, who is the responsible adult. It's like asking who is responsible for raising our children, and the answer is parents are ultimately responsible for their children, and then there are other institutions that build around that basic unit, and in the West, the answer is still it's the utility. The utility has an obligation to serve its customers. The utility has that legal obligation to go out and find enough electricity to serve, and it's the -- just as truant officers and police officers and other people enforce that parental obligation to raise children, regulators and others enforce the obligation to serve.

What I think you're hearing here, though, is that in states or regions where that fundamental obligation to serve has been severed and people are looking for a lot of different answers, where it hasn't been severed, it is a paternal system, and the analogy is it's a paternalistic system or maternalistic maybe. Where that has -- where that fundamental obligations has not been severed, FERC should not help sever it. In other words, where that very elegant relationship that has worked pretty well is in place, then make the FERC and RTO and other measures work with that fundamental obligation, because it is applicable.

I wanted to go back, though, to your first question, which was about demand response and interruptible tariffs, et cetera, and some of Maureen's comments and others, and make the observation that it may be important to have a mix and variety of demand response measures so that if all you had was a couple of big industrial customers who could have had you over a barrel when they needed to, they would probably demand a pretty high price. But if you have a mix, you have the same -- the same principles as a mix of short-term and longer term and supply market supply contracts or peakers. These are dippers, or in the negative, you can have, as we do in Washington, a very broad set of programs, but also potentially even more.

So we have a tariff that we approved that allows Puget to interrupt its customers for economic reasons, and the price that those customers get in the rest of the year is lower, so that they have bought into a lower rate if they agree to be interrupted. But we also allow Puget and others to post a price on the day-ahead market. If you'll shut down tomorrow, I don't care who you are, I will pay you X. So that will be more like the day-ahead. We had, while it was economic to do so, conservation credits to the mass market. If you save so much over last year, we will pay you. As Dick mentioned, we have 283,000 residential customers on time-of-use market with time-of-use meters. When the ability to fluctuate the rates, either generally over a season, and when we have summertime, dinner time, breakfast rates or dinnertime and breakfast rates, but it's infinitely flexible in terms of the type of rates that could be imposed, assuming they're justified. But if you get a mix like that, then you really do have -- just think of the graph. You have your peakers and your long-term conservation in the summer, et cetera, that should work, more or less the same way the contracts do on the positive side.

I don't think it's a total substitute, but it's a partial substitute and could save a lot of money, because in the end, some of these measures that we did really didn't have the kind of economic consequence to the customers that they maybe -- you would have thought they might demand. One of the differences between a large industrial customer as an economic agent -- citizens are just citizens. If you appeal to them to save extra on a certain day, they can do that. That's just at the free end of the response. It also makes sense to pay them for when they are producing the effect that we want.

And the final point I would like to make is once again in a regulated system, you can achieve these very quickly. I noted that Oregon, which is going to go on a deregulated system, has signed up 63 people who want to be on real-time meters. In a day we had 283,000, and there's a tremendous collective power of doing that for the common good.

So my bottom-line plea is where there are regulated retail systems that are working well, allow us to keep what works well when considering your wholesale systems.

THE HONORABLE WOOD: And I want to agree. I think that's actually pretty simple to do. It's when you're in a grid that has a mixture -- and I think that's probably the case. You may all in the West be back in that system as well, but I think everywhere else has a mix. I think the free-loader issue is a mistake that's open, that they don't have obligations to serve and they're kind of leaning hard on the states that are putting the 15 percent tax on everybody else to make sure we're reliable and things like that. So it's trying to make sure the trend-setting markets that we have -- I agree, coming from a formerly bundled state, it was easy to slap the 15 percent on the top, and the 15 percent went to people that actually built plants.

I think we allowed 25 percent of that to be attributable to the type of thing that Dick was talking about, the instantaneously interruptible that you could actually bank and count on. It was a lot easier in that world, but we've got such a mixture, we've got to think through how to make sure there aren't free-loaders and people are paying their fair share.

MR. MEYERS: I'd like to ask, for those of you who do feel, like Diane, that there is a regional role to set reserve margins and really plan out the entire supply and demand equation for the short-term, and long-term also, do you see any benefit for state commissioners to get together in some sort of a council and work with an RTO to do this sort of planning, or would you prefer to stay with existing institutions?

THE HONORABLE WEFALD: One of the problems of working through the RTO is that not all companies these days have to join an RTO. So to work exclusively through the RTO and then requirements are put in place, enforceable requirements are put in place for those who are members of an RTO, it may serve as a disincentive for those companies who do not have to join an RTO to join an RTO. Now, those companies may have been good citizens in the past, voluntarily participating in reliability region guidelines. So there should be a place for those companies who don't have to become members of RTOs at the present time to still participate in this process of reliability.

And so I guess that's my only reason for not saying that they should all be done through the RTO. So then I go to the idea of, perhaps, then we should be as a region working with our reliability regions, because we have side-by-side reliability regions, MAPP, MAIN, and we could have the potential of having others in MISO. We have already experienced the difficulties of having -- last summer I think it was, we had one company in Iowa that said I think I'm going to switch reliability regions, because one reliability region has enforceable reserves and the other one doesn't. And so they said okay, I think we're going to switch, and there really was nothing that MAPP could do about that except they tried to put into place some financial requirements for that company to switch. But those are the difficulties that we're facing these days in our region and are not easy situations for some.

I do think it would be a really good idea if the states in our region came together, in the MISO region as a start, and sat down to talk about these issues of capacity reserves. And so I thank you very much for raising this issue to the level that you have, because I think it has brought it to the attention of more people of how important it is, and I hope we can facilitate a MAPP in some way.

THE HONORABLE WOOD: I definitely remembered you personally bringing that up, Susan, in that conference call, probably one of the first things that came out was a MISO's great but let's make sure we don't forget about this, and we don't want to. We want to make sure it's done the most efficiently.

Why did it not stay with the reliability region? What event transpired that that kind of shifted over to MISO from MAPP?

THE HONORABLE WEFALD: What I understand is we have a number of reliability regions, and they all have different requirements. And so even when -- there was a merger suggested last year between MAPP and MAIN. Well, then, the requirements for enforced reserves became an issue. We felt it was so important to keep these enforced reserves, and the other MAIN doesn't have enforced reserves, and people were not ready to compromise on that issue at that point.

And quite frankly, I was one who didn't think we should compromise on that issue. I think enforceable reserves are very important.

THE HONORABLE WELCH: I think Susan's answer highlights the answer I would give to that question. It's always nice for state commissioners to get together informally, through formal structures, and provide input for things like the RTO, but that actually isn't the difficult question. The difficult question is who has the ability to force things to happen and force things not to happen, and there isn't anything between the individual states and the federal government right now. It's either FERC or the states, and the example we gave is a perfect example. There wasn't any regional group -- I don't know what FERC's authority might have been in that situation, but there wasn't any one state that could bind or any collection of states that could bind a recalcitrant state to reach a direct decision.

You asked the question whether or not the states should find a way to participate in the RTO process. Absolutely. But the fact that we participate in the process by our input is not the same thing as saying we have any clout collectively as things now stand. Now, there are some discussions underway at various levels about whether or not Congress should pass legislation permitting interstate compacts, multistate compacts, to deal with these issues and talk about various other things. Right now there isn't anything there. So again, if you want -- if it is important to have a single decisionmaker dealing with a regional market on a regional basis, I'm not sure there's an alternative right now to do that.

THE HONORABLE WOOD: With that frightening thought, Loretta, we will let you have the last word.

THE HONORABLE LYNCH: I just wanted to point out what my mom used to do. I come from a family of six girls and talks about a bunch of cats in a bag. She started out with okay, imposing what the rules were on us, and it never did quite work because we'd just undermine each other and grump around the house and were generally miserable and took it out on her. Until she started making us vulnerable and say work it out yourselves. Eventually we figured out how to do that and be respectful of our individual quirks. That's how rules worked in my house, and I take that forward with me, understanding what it's like to have rules imposed as the rules developed.

THE HONORABLE WOOD: We will thank everybody, our wonderful panelists, and we will see you on the 14th at the D.C. Convention Center, at 8:30.

(Whereupon, at 5:45 p.m., the workshop was concluded.)